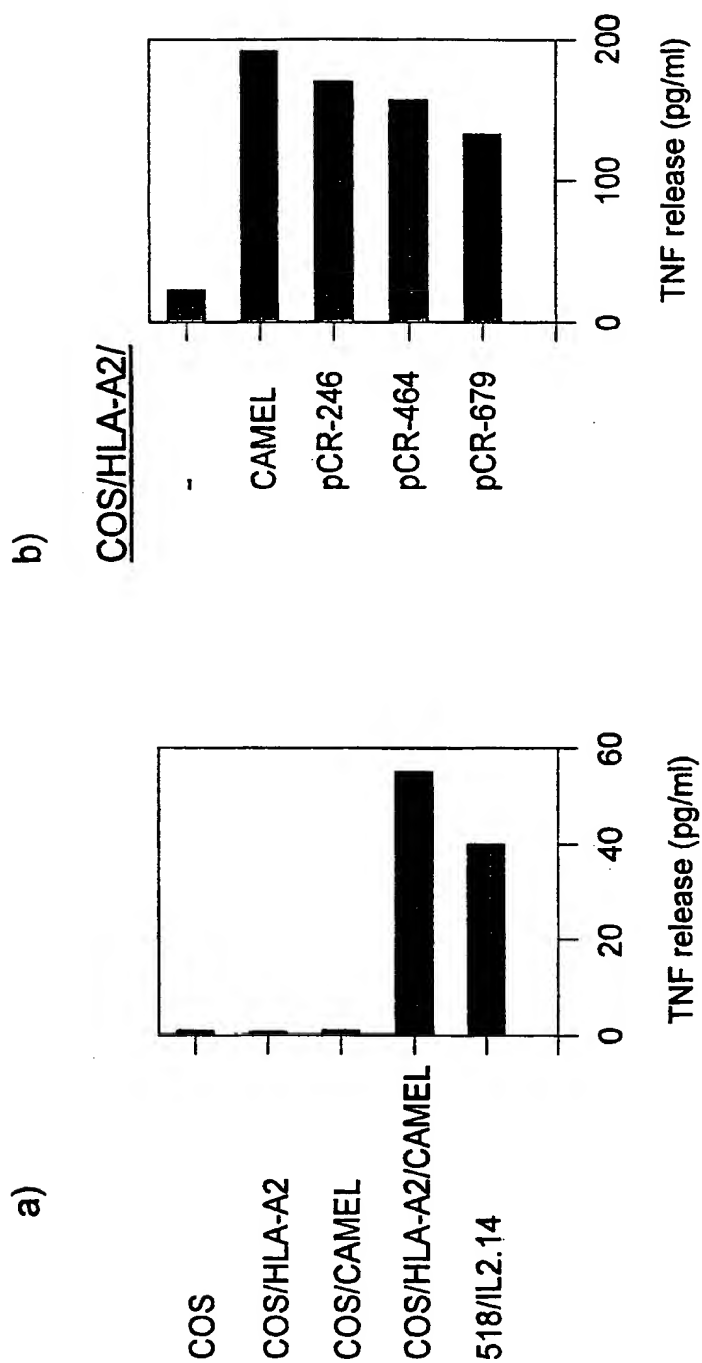


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Fig. 1



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Fig. 2A

FIGURE 2 A)

CAMEL  
LAGE-1<sup>S</sup> 48  
LAGE-1<sup>L</sup> 50  
NY-ESO-1 48

-----  
--ATCCTCGTGGCCCTGACCTTCTCTGTAGAGCCGGGCAGAGGCTCCG  
GCATCCTCGTGGCCCTGACCTTCTCTGTAGAGCCGGGCAGAGGCTCCG  
--ATCCTCGTGGCCCTGACCTTCTCTGTAGAGCCGGGCAGAGGCTCCG

CAMEL 14  
LAGE-1<sup>S</sup> 98  
LAGE-1<sup>L</sup> 100  
NY-ESO-1 98

-----CGACGGGCGATGCT  
GAGCC**ATG**CAGGCCGAAGCCAGGCCACAGGGGTTTCGACGGCGATGCT  
GAGCC**ATG**CAGGCCGAAGCCAGGCCACAGGGGTTTCGACGGCGATGCT  
GAGCC**ATG**CAGGCCGAAGCCAGGCCACAGGGGTTTCGACGGCGATGCT

\*\*\*\*\*

CAMEL 64  
LAGE-1<sup>S</sup> 148  
LAGE-1<sup>L</sup> 150  
NY-ESO-1 148

GATGGCCCAGGAGGCCCTGGCATTCCTGATGGCCCAGGGGCAATGCTGG  
GATGGCCCAGGAGGCCCTGGCATTCCTGATGGCCCAGGGGCAATGCTGG  
GATGGCCCAGGAGGCCCTGGCATTCCTGATGGCCCAGGGGCAATGCTGG  
GATGGCCCAGGAGGCCCTGGCATTCCTGATGGCCCAGGGGCAATGCTGG

\*\*\*\*\*

CAMEL 114  
LAGE-1<sup>S</sup> 198  
LAGE-1<sup>L</sup> 200  
LAGE-1<sup>L</sup> 198

CGGCCCAGGAGGCGGGTGCCACGGGCGCAGAGTCCCCGGGCGCAG  
CGGCCCAGGAGGCGGGTGCCACGGGCGCAGAGTCCCCGGGCGCAG  
CGGCCCAGGAGGCGGGTGCCACGGGCGCAGAGTCCCCGGGCGCAG  
CGGCCCAGGAGGCGGGTGCCACGGGCGCAGAGTCCCCGGGCGCAG

\*\*\*\*\*

Fig. 2A continued

CAMEL 164  
LAGE-1<sup>s</sup> 248  
LAGE-1<sup>L</sup> 250  
NY-ESO-1 248  
GGGCAGCAAGGGCCTCGGGGCCGAGAGGAGGCGGCCCGGGGTCCGCAT  
GGCAGCAAGGGCCTCGGGGCCGAGAGGAGGCGGCCCGGGGTCCGCAT  
GGCAGCAAGGGCCTCGGGGCCGAGAGGAGGCGGCCCGGGGTCCGCAT  
GGCAGCAAGGGCCTCGGGGCCGAGAGGAGGCGGCCCGGGGTCCGCAT  
\*\*\*\*\*  
CAMEL 214  
LAGE-1<sup>s</sup> 298  
LAGE-1<sup>L</sup> 300  
NY-ESO-1 298  
GGGGTGCCGCTTCTGCGCAGGATGGAAGGTGCCCCCTGCGGGGCCAGGAG  
GGGGTGCCGCTTCTGCGCAGGATGGAAGGTGCCCCCTGCGGGGCCAGGAG  
GGGGTGCCGCTTCTGCGCAGGATGGAAGGTGCCCCCTGCGGGGCCAGGAG  
GGGGTGCCGCTTCTGCGCAGGATGGAAGGTGCCCCCTGCGGGGCCAGGAG  
\*\*\*\*\*  
CAMEL 264  
LAGE-1<sup>s</sup> 348  
LAGE-1<sup>L</sup> 350  
NY-ESO-1 348  
GCCGGACAGCCGCCCTGCTTCAGTTGCACATCACGATGCCCTTCTCGTCGC  
GCCGGACAGCCGCCCTGCTTCAGTTGCACATCACGATGCCCTTCTCGTCGC  
GCCGGACAGCCGCCCTGCTTCAGTTGCACATCACGATGCCCTTCTCGTCGC  
GCCGGACAGCCGCCCTGCTTCAGTTGCACATCACGATGCCCTTCTCGTCGC  
\*\*\*\*\*  
CAMEL 314  
LAGE-1<sup>s</sup> 398  
LAGE-1<sup>L</sup> 400  
NY-ESO-1 398  
CCATGGAAGCGGAGCTGGTCCGCAGGATCCTGTCCCGGGATGCCGCACCT  
CCATGGAAGCGGAGCTGGTCCGCAGGATCCTGTCCCGGGATGCCGCACCT  
CCATGGAAGCGGAGCTGGTCCGCAGGATCCTGTCCCGGGATGCCGCACCT  
CCATGGAAGCGGAGCTGGTCCGCAGGATCCTGTCCCGGGATGCCGCACCT  
\*\*\*\*\*

Fig. 2A continued

CAMEL 364 CTCCCCGACAGGGGGGTTCTGAAGGACTTCACCCGTGTCCGGCAACCT  
LAGE-1<sup>s</sup> 448 CTCCCCGACAGGGGGGTTCTGAAGGACTTCACCCGTGTCCGGCAACCT  
LAGE-1<sup>L</sup> 450 CTCCCCGACAGGGGGGTTCTGAAGGACTTCACCCGTGTCCGGCAACCT  
NY-ESO-1 448 CTCCCCGTGCCAGGGGTGCTTCTGAAGGAGTTCACCTGTGTCCGGCAACAT  
\* \* \* \* \*  
\* \* \* \* \*

CAMEL 373 ACTGTTTAT-----  
LAGE-1<sup>s</sup> 457 ACTGTTTAT-----  
LAGE-1<sup>L</sup> 500 ACTGTTTATGTCAGTTCGGGACCAGGACAGGGAAGCGCTGGCGGATGA  
NY-ESO-1 457 ACTGACTAT-----  
\* \* \* \* \*

CAMEL 373 -----  
LAGE-1<sup>s</sup> 457 -----  
LAGE-1<sup>L</sup> 550 GGGTGGTGGGTGGGGCTGGGATCCCGCCTCCCCGGAGGGGCAGAAAGCT  
NY-ESO-1 457 -----

CAMEL 373 -----  
LAGE-1<sup>s</sup> 457 -----  
LAGE-1<sup>L</sup> 600 AGAGATCTCAGAACACCCCAACACAAAGGTCTCAGAACAGAGACCTGGTAC  
NY-ESO-1 457 -----

Fig. 2A continued

CAMEL  
LAGE-1<sup>s</sup>  
LAGE-1<sup>L</sup>  
NY-ESO-1

373  
457  
650  
457

-----  
-----  
ACCAGCCCGCCACCCGAGGAGCCAGGAGATGGGTGCAGAGGTG  
-----  
-----

CAMEL  
LAGE-1<sup>s</sup>  
LAGE-1<sup>L</sup>  
NY-ESO-1

385  
469  
700  
469

-----  
-----  
TCGCCTTAATGTGATGTTCTCTGCCCTCACATTAGCCGACTGACTGC  
-----  
-----

\*\*\*\*\*  
\*\*\*\*\*

CAMEL  
LAGE-1<sup>s</sup>  
LAGE-1<sup>L</sup>  
NY-ESO-1

435  
519  
750  
519

TGCAGACCACCGCCAACTGCAGCTCTCCATCAGCTCCTGTCTCCAGCAGC  
TGCAGACCACCGCCAACTGCAGCTCTCCATCAGCTCCTGTCTCCAGCAGC  
TGCAGACCACCGCCAACTGCAGCTCTCCATCAGCTCCTGTCTCCAGCAGC  
TGCAGACCACCGCCAACTGCAGCTCTCCATCAGCTCCTGTCTCCAGCAGC  
\*\*\*\*\*  
\*\*\*\*\*

CAMEL  
LAGE-1<sup>s</sup>  
LAGE-1<sup>L</sup>  
NY-ESO-1

485  
569  
800  
569

TTTCCCTGTTGATGTGGATCACGCAGTGCTTTCTGCCCGTGTTTGTGGCT  
TTTCCCTGTTGATGTGGATCACGCAGTGCTTTCTGCCCGTGTTTGTGGCT  
TTTCCCTGTTGATGTGGATCACGCAGTGCTTTCTGCCCGTGTTTGTGGCT  
TTTCCCTGTTGATGTGGATCACGCAGTGCTTTCTGCCCGTGTTTGTGGCT  
\*\*\*\*\*  
\*\*\*\*\*

Fig. 2A continued

CAMEL  
LAGE-1<sup>s</sup>  
LAGE-1<sup>L</sup>  
NY-ESO-1

CAGGCTCCCTCAGGCGAGAGCGGCTAAGCCAGCCCTGGCGCCCTTCCTA 535  
CAGGCTCCCTCAGGCGAGAGCGGCTAAGCCAGCCCTGGCGCCCTTCCTA 619  
CAGGCTCCCTCAGGCGAGAGCGGCTAAGCCAGCCCTGGCGCCCTTCCTA 850  
CAGCCTCCCTCAGGCGAGAGCGGCTAAGCCAGCCCTGGCGCCCTTCCTA 519  
\*\*\* \*\*\*\*\*

CAMEL  
LAGE-1<sup>s</sup>  
LAGE-1<sup>L</sup>  
NY-ESO-1

GGTCATGCCTCCTCCCTAGGGAATGGTCCCAGCACGAGTGGCCAGTTCA 585  
GGTCATGCCTCCTCCCTAGGGAATGGTCCCAGCACGAGTGGCCAGTTCA 669  
GGTCATGCCTCCTCCCTAGGGAATGGTCCCAGCACGAGTGGCCAGTTCA 900  
GGTCATGCCTCCTCCCTAGGGAATGGTCCCAGCACGAGTGGCCAGTTCA 669  
\*\*\*\*\*

CAMEL  
LAGE-1<sup>s</sup>  
LAGE-1<sup>L</sup>  
NY-ESO-1

TTGTGGGGCCTGATTGTTGTCGCTGGAGGAGGACGGCTTACATGTTG 635  
TTGTGGGGCCTGATTGTTGTCGCTGGAGGAGGACGGCTTACATGTTG 719  
TTGTGGGGCCTGATTGTTGTCGCTGGAGGAGGACGGCTTACATGTTG 950  
TTGTGGGGCCTGATTGTTGTCGCTGGAGGAGGACGGCTTACATGTTG 719  
\*\*\*\*\*

CAMEL  
LAGE-1<sup>s</sup>  
LAGE-1<sup>L</sup>  
NY-ESO-1

TTTCTGTAGAAAATAAAGCTGAGCTACGAAAAAATAAAAAA 679  
TTTCTGTAGAAAATAAAGCTGAGCTACGAAAAAATAAAAAA 767  
TTTCTGTAGAAAATAAAGCTGAGCTACGAAAAAATAAAAAA 993  
TTTCTGTAGAAAATAAAGCTGAGCTACGAAAAAATAAAAAA 752  
\*\*\*\*\*

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Fig. 2B

## Protein Translations

## ORF3

LAGE-1<sup>S</sup> MQAEGQGTGGSTGDADGPGGPGIPDGPGGNAGGPGEAGAT 40  
LAGE-1<sup>L</sup> MQAEGQGTGGSTGDADGPGGPGIPDGPGGNAGGPGEAGAT 40  
NY-ESO-1 MQAEG**R**GTGGSTGDADGPGGPGIPDGPGGNAGGPGEAGAT 40

LAGE-1<sup>S</sup> GGRGPRGAGAAARASGPRGGAPRGPHGGAASAQDGRCP CGA 80  
LAGE-1<sup>L</sup> GGRGPRGAGAAARASGPRGGAPRGPHGGAASAQDGRCP CGA 80  
NY-ESO-1 GGRGPRGAGAAARASGPGGAPRGPHGGAAS**GLNGCC**R CGA 80

LAGE-1<sup>S</sup> RRPDSRLLQLHITMPFSSPMEAEELVRRILSRDAAPLPRPG 120  
LAGE-1<sup>L</sup> RRPDSRLLQLHITMPFSSPMEAEELVRRILSRDAAPLPRPG 120  
NY-ESO-1 **RG**PE SRLL**EF**YLAMPF**AT**PMPEAEEL**ARRSLAQDAP**PLPVPG 120

LAGE-1<sup>S</sup> AVLKDFTVSGNLLFIRLTAADHRQLQLSIS~~SS~~CLQQLSLLM 160  
LAGE-1<sup>L</sup> AVLKDFTVSGNLLF**MSVRDQDREGAGRM**R**VVG**LG**LSASP** 160  
NY-ESO-1 **VLLKE**FTVSGN**ILT**IRLTAADHRQLQLSIS~~SS~~CLQQLSLLM 160

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Fig. 2B continued

LAGE-1<sup>S</sup> WITQCFLPVFLAQAPSGQRR 180  
 LAGE-1<sup>L</sup> **EGQKARDLRTPKHKVSEQRPGTGPPEGAQGDGCRGVA** 200  
 NY-ESO-1 WITQCFLPVFLAQPPSGQRR 180

LAGE-1<sup>S</sup> 180 aa, 18.2 kD  
 LAGE-1<sup>L</sup> 210 aa, 21.1 kD  
 NY-ESO-1 180 aa, 18.2 kD

**FNVMFSAPHI****ORF1**

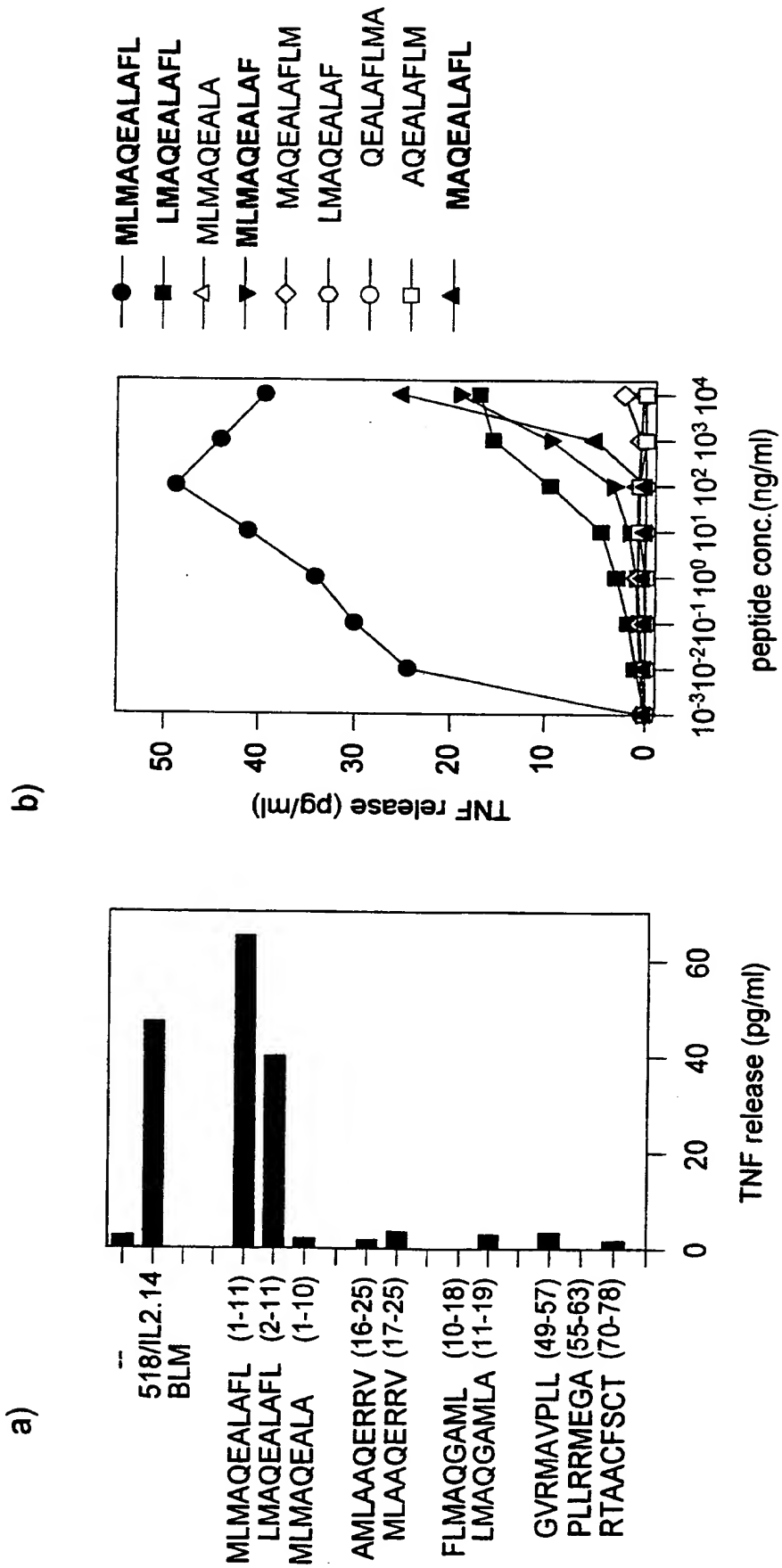
LAGE-1<sup>S</sup> MLMAQEALAFMLAQGAMLAAQERRVPRAAEVPGAQQQGP 40  
 LAGE-1<sup>L</sup> MLMAQEALAFMLAQGAMLAAQERRVPRAAEVPGAQQQGP 40  
 NY-ESO-1 MLMAQEALAFMLAQGAMLAAQERRVPRAAEVPGAQQQGP 40

LAGE-1<sup>S</sup> RGREEAPRGVRMAVPLLRMEGAPAGPGGRTAACFSCTSR 80  
 LAGE-1<sup>L</sup> RGREEAPRGVRMAVPLLRMEGAPAGPGGRTAACFSCTSR 80  
 NY-ESO-1 RGREEAPRGVRMA**ARLQG** 58

LAGE-1<sup>S</sup> CLSRRPWKRSWSAGSCPGMPHLSPDQGRF 109 aa, 11.7 kD  
 LAGE-1<sup>L</sup> CLSRRPWKRSWSAGSCPGMPHLSPDQGRF 109 aa, 11.7 kD  
 NY-ESO-1 58 aa, 6.2 kD

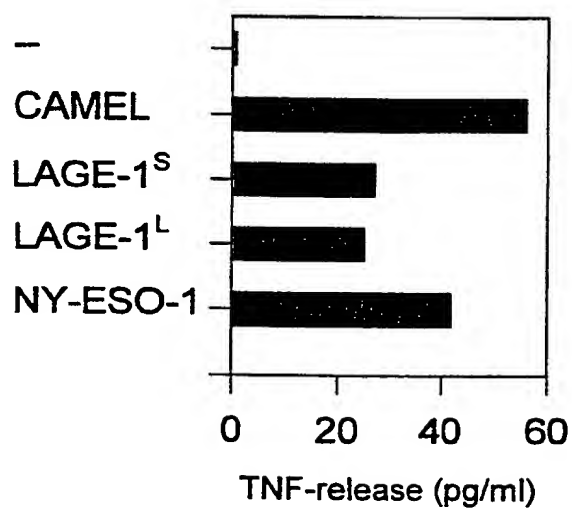
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Fig. 3



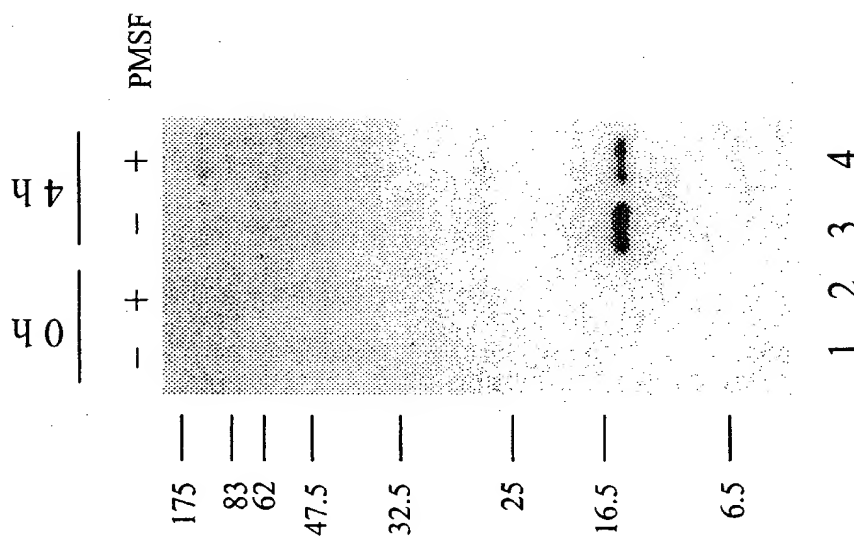
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Fig. 4

COS/HLA-A2/

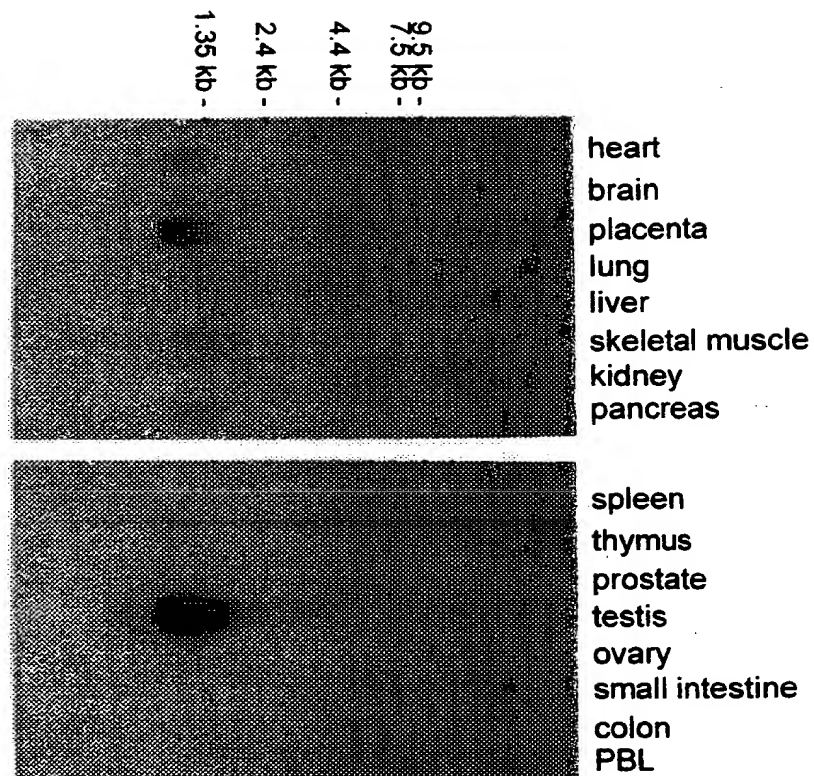
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Fig. 5



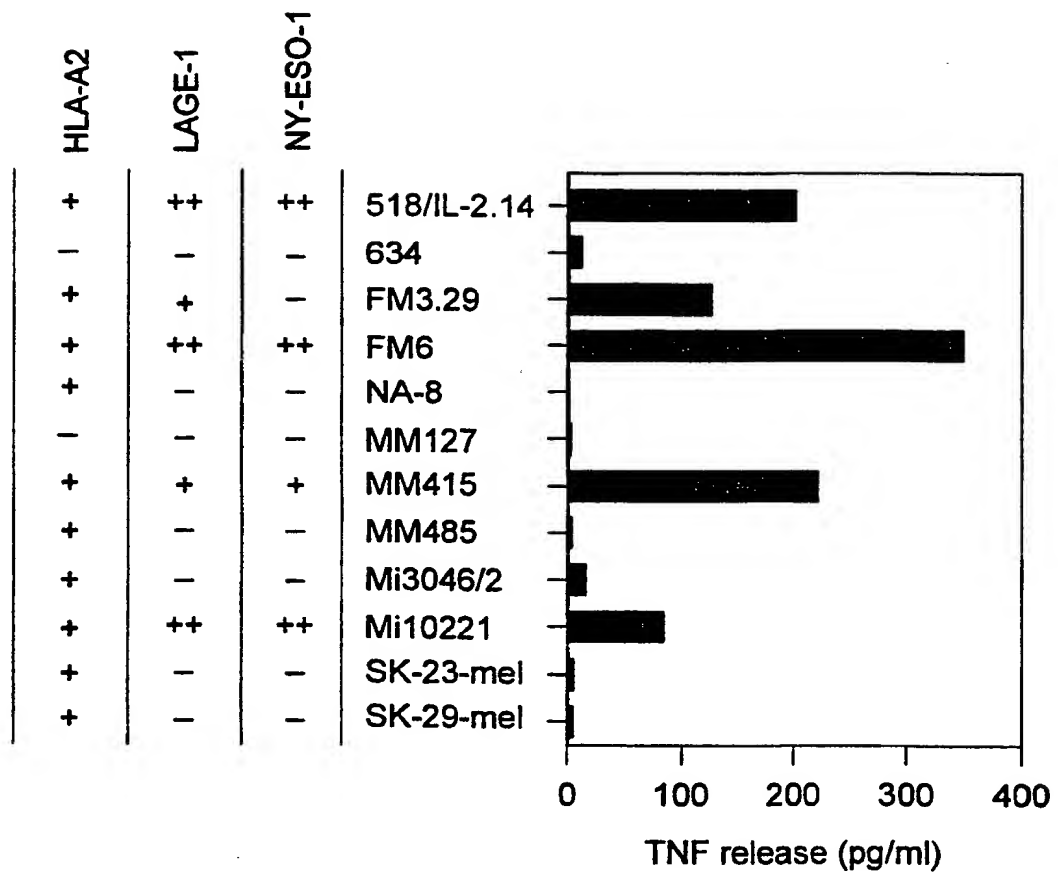
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Fig. 6A



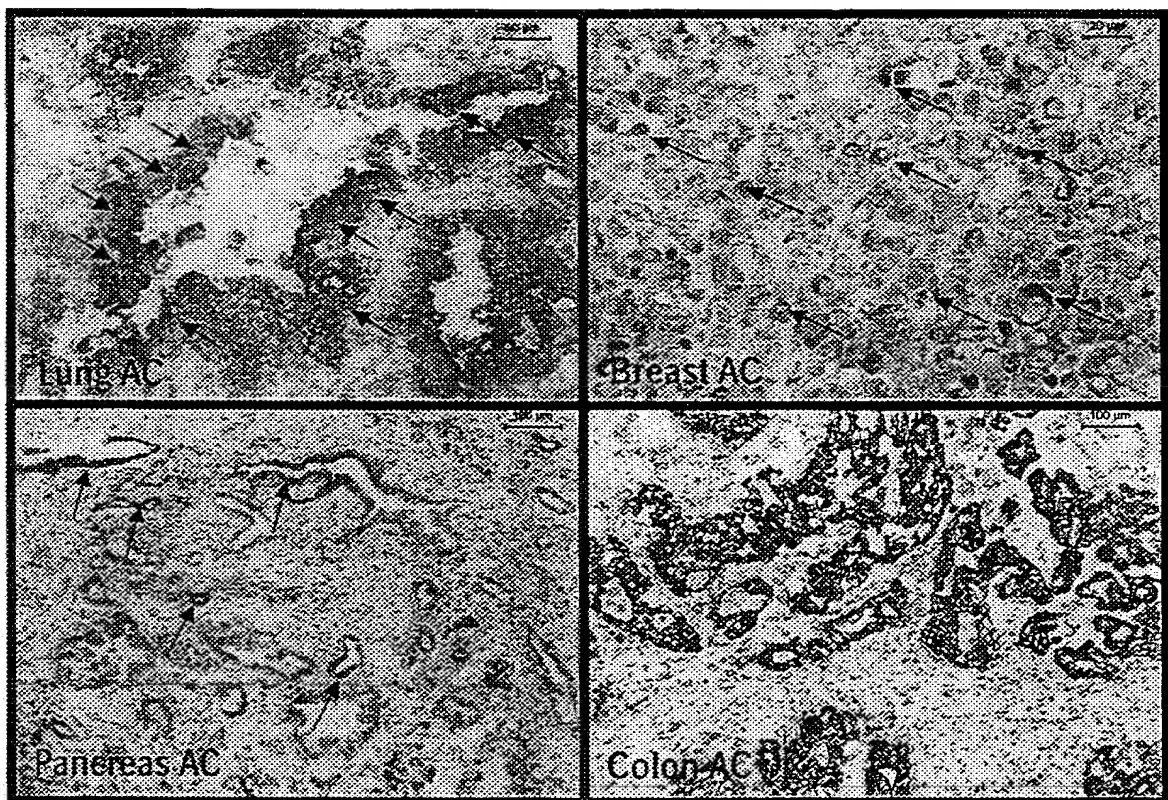
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Fig. 6B



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Fig. 7



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Fig. 8

